

AMENDMENTS

Listing of Claims:

The following listing of claims replaces all previous listings or versions thereof:

1. (Currently amended) A method for regenerating nerve tissue *in vivo* comprising:
 - (a) providing a device comprising
 - (i) a biodegradable conduit comprising at least two openings and a passage connecting said openings,
 - (ii) helper cells transformed with an expression cassette comprising an inducible promoter, active in said cells, that directs the expression of a polynucleotide encoding a growth factor, wherein said cells are disposed within said passage,
and
 - (b) implanting said device in a subject such that each of said openings are adjacent to nerve tissues, and
 - (c) contacting said implanted device with an inducer of said inducible promoter, whereby said nerve tissues are stimulated to regenerate into said passage by said growth factor produced by said cells.
2. (Currently amended) The method of claim 1, wherein said cells are fibroblast cells, stem cells, fat cells, Schwann cells, astrocytes, endothelial cells and/or ex vivo propagated nerve cells.
3. (Original) The method of claim 1, wherein said biodegradable conduit is comprised of PLGA or PLLA.
4. (Canceled) The method of claim 1, wherein the growth factor expression is inducible.

5. (Original) The method of claim 1, wherein said growth factor is Nerve Growth Factor (NGF), Fibroblast Growth Factor (FGF), Brain-Derived Neurotrophic Factor (BDNF), GDNF, VEGF, neurotrophin 3, or neurotrophin 4-5.
6. (Presently amended) The method of claim [[4]]1, wherein ~~inducible growth factor expression is driven by administration of said inducer is~~ Muristerone A, GS-E, or tetracycline.
7. (Original) The method of claim 6, wherein administration is intravenous, intrathecal, intracavitory and by catheter.
8. (Original) The method of claim 1, wherein said cells further comprise a cell kill gene that renders said cells susceptible to killing following administration of a substance.
9. (Currently amended) The method of claim 8, wherein said cell kill gene is encoded an enzyme and said substance is a prodrug.
10. (Original) The method of claim 9, wherein said cell kill gene comprises a promoter selected from the group consisting of CMV IE, SV40, HSV *tk*, RSV LTR, EF-1 α and ubiquitin.
11. (Currently amended) The method of claim 9, wherein said cell kill gene is encoded thymidine kinase.
12. (Currently amended) The method of claim 8, wherein said cell kill gene is encoded a toxin and said substance is an activator of the transcription of said cell kill gene.
13. (Original) The method of claim 8, further comprising the step of administering said substance to said subject in an amount sufficient to kill said cells.

14. (Original) The method of claim 13, wherein administration is by is intravenous, intrathecal, intracavitory and by catheter.
15. (Canceled) The method of claim 1, wherein said promoter is selected from the group consisting of CMV IE, SV40, HSV *tk*, RSV LTR, EF-1 α or ubiquitin.
16. (Original) The method of claim 1, wherein said expression construct further comprises a polyadenylation signal.
17. (Original) The method of claim 1, wherein said expression construct further comprises a selectable marker.
18. (Original) The method of claim 1, wherein said expression construct further comprises a screenable marker.
19. (Original) The method of claim 1, wherein said subject is a human.
20. (Currently amended) The method of claim 6, wherein the inductionpromoter is maintainedinduced for 24 hours.
21. (Currently amended) The method of claim 6, wherein the inductionpromoter is maintainedinduced for 48 hours.
22. (Currently amended) The method of claim 6, wherein the inductionpromoter is maintainedinduced for four days.
23. (Currently amended) The method of claim 6, wherein the inductionpromoter is maintainedinduced for seven days.
24. (Currently amended) The method of claim 6, wherein the inductionpromoter is maintainedinduced for ten days.

25-46. (Canceled)